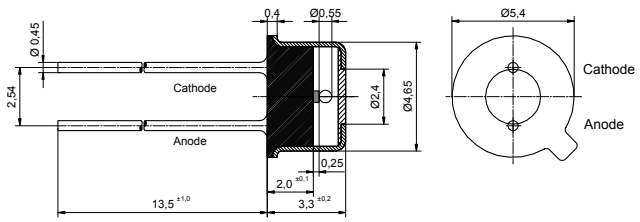
LED - Lamp

ELP-880-014-1

16.11.2007 rev. 04

Radiation	Type	Technology	Case
Infrared	Point source (ball lens)	AlGaAs/GaAs	TO-18 + flat window



Description

High power, high speed infrared point source LED, high reliability, small-size emitting aperture

Applications

Optical communications, safety equipment, automation, optical sensors, optical switches

Maximum Ratings

T_{amb} = 25°C, unless otherwise specified

Parameter	Test conditions	Symbol	Value	Unit
Forward current (DC)		I_F	80	mA
Peak forward current	($t_P \leq 50$ µs, $t_P/T = 1/2$)	I_{FM}	400	mA
Power dissipation		P_D	150	mW
Operating temperature range		T_{amb}	-30 to +100	°C
Storage temperature range		T_{stg}	-40 to +125	°C
Soldering temperature	$t \leq 5$ s, 3 mm from case	T_{sd}	260	°C

Optical and Electrical Characteristics

T_{amb} = 25°C, unless otherwise specified

Parameter	Test conditions	Symbol	Min	Typ	Max	Unit
Forward voltage	I_F = 50 mA	V_F		1.8	2.3	V
Reverse voltage	I_R = 10 µA	V_R	5			V
Radiant power	I_F = 50 mA	Φ_e	2,5	3,5		mW
Radiant intensity	I_F = 50 mA	I_e	23	36		mW/sr
Peak wavelength	I_F = 50 mA	λ_p	865	875	885	nm
Spectral bandwidth at 50%	I_F = 50 mA	$\Delta\lambda_{0.5}$		35		nm
Viewing angle	I_F = 50 mA	φ		12		deg.
Switching time	I_F = 50 mA	t_r, t_f		16		ns

Note: All measurements carried out on *EPIGAP* equipment

We reserve the right to make changes to improve technical design and may do so without further notice.
Parameters can vary in different applications.All operating parameters must be validated for each customer application by the customer.

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